1998

CPA expert 1998 winter

American Institute of Certified Public Accountants

AICPA Newsletter for Providers of Business Valuation & Litigation Services

CPA Expert

Winter 1998

AVOIDING THE PITFALLS OF A DAUBERT CHALLENGE

Roman M. Silberfeld, JD

As complex expert testimony continues to be more and more a part of the fabric of modern trials, so too will we witness an increase in trials within trials, or mini-trials, the purpose of which is to test the reliability, validity, and ultimately the admissibility of expert testimony. These mini-trial attacks on witnesses who propose to testify arise from recent decisions of both the United States and California Supreme Courts, as well as the U.S. Circuit Courts of Appeal. These decisions about expert and scientific testimony begin with the United States Supreme Court decision in *Daubert v. Merrell Dow Pharmaceuticals* in 1993 and continue with the Ninth Circuit Decision in *Daubert on Remand* in 1995. The California approach was set out by the California Supreme Court in *People v. Kelly in* 1976 and was reaffirmed in 1994 in *People v. Leahy,* in which the Court rejected *Daubert.* Careful attention to the precepts of the Ninth Circuit opinion in *Daubert* will assist in avoiding the pitfalls of the *Daubert* analysis and will aid in the successful presentation of often controversial scientific and other expert testimony.

A recent U.S. Supreme Court decision expanded the power of trial judges in determining admissibility regarding expert testimony. In *General Electric Company vs. Joiner* (118. S.Ct. 512 (1997)), a worker sued his employer alleging that exposure to toxic chemicals caused him to contract cancer. The Trial Court ruled that certain expert opinions were inadmissible. The Circuit Court of Appeal reversed the Trial Court's ruling, applying a stringent standard of review to the decision of the trial judge. The Supreme Court reversed the Circuit Court and reinstated the decision of the trial judge, holding that:

> ...the Court of Appeals erred in its review of the exclusion of Joiner's experts' testimony. In applying an overly 'stringent' review to that ruling, it failed to give the Trial Court the deference that is the hallmark of abuse of discretion review.... We believe that a proper application of the correct standard of review here indicates that the District Court did not abuse its discretion.

Thus, by its decision in *Joiner,* the Supreme Court has vested in trial judges even greater powers to determine the scope and shape of trials. When complex technical and expert testimony is involved and the stakes are high, trial judges will need to make close and difficult decisions. *Joiner* teaches us that these decisions will rarely be disturbed on appeal. Accordingly, the forum in which to prepare and win these fights is the Trial Court.

THE PROCEDURAL HISTORY OF *DAUBERT* AND *DAUBERT ON REMAND*

Prior to the Supreme Court decision in *Daubert,* the admissibility of scientific evidence was governed by the "general acceptance" standard of the *Frye* decision. (*Frye v. United States,* 293 F. 1013, 1014 (D.C. Cir. 1923)). In *Daubert,* the Supreme Court held that the Federal Rules of Evidence displaced Frye and other like cases (*Daubert v. Merrell Dow Pharmaceuticals, Inc.,* U.S., 113 S. Ct. 2786, 2794 (1993) *(Daubert I)*). But the Court failed or refused to define admissibility, choosing instead to remand the *Daubert* case to the Ninth Circuit with certain "general observa-

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tions" about how courts should analyze admissibility. It was left then to the Ninth Circuit on remand to grapple with the admissibility test and fashion a workable rule to be applied by trial judges.

THE NINTH CIRCUIT *DAUBERT* ANALYSIS

Since the Supreme Court decision, more than thirteen hundred cases have been published that discuss the *Daubert* standard. None, however, is more instructive than the Ninth Circuit decision, which provides, in considerable detail, a road map for the presentation of the *Daubert* attack as well as the way out of the forest (*Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 43 F.3d 1311 (9th Cir. 1995) *(Daubert II)*).

In remanding the *Daubert* case to the Ninth Circuit, the Supreme Court handed to the Court panel a two-prong test of admissibility. First, did the proposed evidence have sufficient reliability in that it was "derived by scientific method" and the expert's work product amounted to "good science" (*Daubert II,* 113 S. Ct. at 2795, 2797)? Second, is the evidence "relevant to the task at hand" in that a logical "fit" exists between the testimony and a material issue of the case (*Id.* at 2797)? Although the Supreme Court did enumerate some factors to consider in determining the first prong, they did not provide much more guidance. Against this backdrop, the Ninth Circuit opinion of Judge Kozinski enters the "brave new world" of judges as the final arbiters of what is "good science" and what is not.

The Ninth Circuit Court first addressed the reliability prong of the Supreme Court opinion dealing with scientific knowledge. Having wrestled with a multiplicity of factors that might be considered, the Court settled on three major factors that would establish to the satisfaction of the Court that the proffered evidence constituted reliable expert knowledge derived by the scientific method. These factors are:

1. Whether the research that produced the opinion evidence was derived from the litigation process or independent of litigation (*Daubert II,* 43 F.3d at 1316-17).
2. Whether the expert has published his or her work and, if published, whether the published work has been subject to peer review analysis (*Id.* at 1318).
3. Whether the expert and proponent of the evidence can identify an objective source—usually an independent witness—who can attest that the methods used were acceptable to at least a recognized minority of the scientific community, if not a majority of the community involved (*Id.* at 1319).

Significantly, the Court considered these factors "illustrative rather than exhaustive" and not necessarily "equally applicable (or applicable at all) in every case" (*Id.* at 1317). In a subsequent decision, the Ninth Circuit emphasized that "scientific method, as it is practiced by (at least) a recognized minority of scientists in the field" is enough for admissibility even if tests were not conducted independently of litigation nor subject to peer review, because "these are only two of the ways plaintiffs can demonstrate admissibility" under the first prong of the *Daubert* analysis (*Southland Sod Farms v. Stover Seed Co.,* 108 F.3d 1134, 1142 (9th Cir. 1997)).

In analyzing the second prong enunciated in *Daubert I*—the "fit" and relevancy requirement—the Ninth Circuit relied on the "helpfulness" standard of Rule 702 of the Federal Rules of Evidence. Such a standard requires that the proffered expert evidence be relevant

CPA Expert, *Winter 1998, Volume 3, Number 2. Published by the American Institute of Certified Public Accountants.* *Subscription rates: $72 a year; for members of the AICPA MCS Section: $36. To order call 800-862-4272.* CPA Expert *is designed to provide timely nonauthoritative information only. It does not provide legal advice. The views of the authors and editors are their own, not those of the AICPA.*

to an issue to be determined in the case and assist the trier of fact in resolving the issue (*Daubert II,* 43 F.3d at 1320). If the evidence is found not to be helpful in the determination of the issue, then the evidence is irrelevant, would lead to jury confusion, and should be excluded.

DAUBERT AND THE SCIENTIFIC METHOD—THE METHODOLOGY–CONCLUSION DISTINCTION

Although the *Daubert* analysis of both the Supreme Court and the Ninth Circuit is specific and detailed, one overriding concept must be kept in mind. The focus of the *Daubert* challenge cannot and should not be on the worthiness or believability of the ultimate opinion that the witness proposes to render. Instead, the focus, as the Supreme Court instructs, must be on whether the method and principles from which the evidence is derived are consistent with the scientific method. As the Supreme Court explicitly stated:

> The inquiry envisioned is...a flexible one. Its overarching subject is the scientific validity—and thus the evidentiary relevance and reliability—of the principles that underlie a proposed submission. The focus, of course, must be solely on principles and methodology, not on the conclusions that they generate.

Therefore, "The test under *Daubert* is not the correctness of the expert's conclusions but the soundness of his methodology" (*Daubert II,* 43 F.3d at 1318).

The Supreme Court emphasized that science is defined through its processes, not through its product and that, as many leading scientific organizations have held, science consists not of "an encyclopedic body of knowledge about the universe...but rather represents a process for proposing and refining theoretical explanations about the world that are subject to further testing and refinement" (*Daubert I,* 113. S. Ct. 2786, 2795).

Therefore, as difficult and complex as *Daubert* issues may be, analysis of them should never stray from methods to conclusions, from principles to punch line. However dubious the conclusions of a witness, they should remain admissible so long as they meet the construct of the *Daubert* analysis.

RELIABILITY OF METHODOLOGY

No matter how qualified the expert, testimony can be excluded under *Daubert* if the expert fails to adhere to accepted methods in reaching conclusions. In *Smelser v. Norfolk Southern Ry. Co.* (105 F.3d 299 (6th Cir. 1997)), the Sixth Circuit held that expert testimony of a biomechanical engineer was improperly admitted at trial because of his unreliable methodology. Similarly, in *Wintz By and Through Wintz v. Northrop* (110 F.3d 508 (7th Cir. 1997)), a toxicologist's testimony was excluded because his scientific knowledge and methodology were held insufficient under *Daubert*.

The *Smelser* and *Wintz* decisions point out that experts not only need to have the requisite qualifications in the relevant field of study, but also must go about their tasks in appropriate and conventional ways.

METHODOLOGY AND QUALIFICATIONS

The mandate of *Daubert* requires that the Trial Court consider both the qualifications and scientific methodology of proposed experts. Recent federal cases illustrate that an expert's qualifications and methodology are linked in determining whether to admit expert testimony.

Liberality and flexibility in evaluating qualifications must be the rule, and experts should not be strictly confined to the narrow area of their own practice. However, an expert cannot rest on his or her credentials alone as "the expert's bald assurance of validity is not enough" to prove scientific reliability (*Daubert II,* 43 F.3d at 1316).

Courts have recognized that an expert's qualifications and expertise can be circumstantial evidence in determining whether the underlying opinions are reliable under *Daubert.* In *Estate of Bud Hill v. Conagra Poultry Company* (1997 WL538887 (N.D. GA)), the Court, after carefully analyzing the expert's work including a careful review of regression analyses and the law relating thereto, found the expert's method to be sufficiently reliable. In *Hopkins v. Dow Corning Corp.* (33 F.3d 1116 (9th Cir. 1994)), the Ninth Circuit ruled that a toxicologist's expert testimony on the causal connection between breast implants and the disease suffered by the plaintiff was admissible under *Daubert.* While there was no solid body of epidemiological data for the toxicologist to review, the Court concluded that his testimony was reliable, and therefore admissible, based on his qualification as "a recognized expert on the

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immunological effects of silicone in the human body."

While the qualifications and expertise of the expert can bolster the reliability of his or her reasoning, it is important to note that a precise matching of expertise and testimonial subject matter is not required. Provided the expert conclusions are derived by the scientific method, the lack of specialization in a particular field, use of novel methodology, or lack of supporting authority should affect only the weight of the opinion and not the admissibility of the evidence. (*McCullock v. H. B. Fuller,* 61 F.3d 1038, 1044 (2d Cir. 1995); *Quinton v. Farmland Indus. Inc.,* 928 F.2d 335 (10th Cir. 1991)).

The inadmissibility of fatally flawed accounting testimony was aptly demonstrated in *Frymire-Brinati v. KPMG Peat Marwick,* 2F.3D 183 (1993). The action was brought by investors in a corporation against the accounting firm of the corporation for aiding and abetting securities fraud and common law fraud. To prove the plaintiff's case, an accountant was permitted to testify, over objection, that the defendant accounting firm had violated seven of the ten generally accepted auditing standards. This powerful testimony was permitted by the Trial Court even though the analysis by the expert failed to meet the requisite methodology standards under *Daubert.* The Circuit Court had little difficulty in finding that, among other errors, the Trial Court erred in admitting such defective testimony:

> Admitting Hassett's 'fairly simple pass' into evidence just because he is an expert in accounting is problematic, for Hassett conceded that he did not employ the methodology that experts in valuation find essential.... The Trial Judge did not conduct a 'preliminary assessment' before permitting Hassett to testify about his method. Although District judges possess considerable discretion in dealing with expert testimony...on this record, the Court could not properly have admitted Hassett's valuation.

Because an expert's qualifications and methodologies are now routinely subject to attack in Court, both counsel and experts should work together to carefully select and prepare experts to withstand these challenges. In doing so, any specialty recognition that the expert holds would, of course, be both useful and persuasive in convincing a Trial Court that the expert is qualified to testify. For example, holding an Accredited in Business Valuation (ABV) from the AICPA would help to elevate the special knowledge of a CPA in the eyes of the Court and establish involvement and competency in this field.

DAUBERT'S APPLICATION TO NONSCIENTIFIC EXPERT TESTIMONY

Rule 702 of the Federal Rules of Evidence states that qualified expert testimony relating to "scientific, technical, or other specialized knowledge" is admissible if it will "assist a trier of fact to understand the evidence or to determine a fact in issue." Therefore, the rule itself is not limited to scientific testimony. Despite the rule's unambiguous language, Circuit Courts have split on whether the *Daubert* standard, interpreting Rule 702, applies to nonscientific expert testimony. This confusion is most likely a result of the majority's failure to address how *Daubert* should apply to "technical or other specialized knowledge" (*Daubert I,* 509 U.S. 579, 593-94 (Rehnquist, C.J., concurring in part and dissenting in part)).

Several circuits have applied a modified version of the *Daubert* factors when dealing with nonscientific testimony. These courts recognize that *Daubert* plays an important role in ensuring reliability and, therefore, is instructive in evaluating nonscientific expert testimony.

In *Habecker v. Clark Equipment Co.,* the Third Circuit Court found inadmissible expert testimony relating to an alleged design defect in a product liability action. Focusing on the expert's qualifications and underlying methodology of the testing of forklifts, the Court did not literally apply *Daubert's* factors, but rather relied on *Daubert* for the proposition that "any and all" expert testimony must be sufficiently reliable *(Habecker,* 36 F.3d 278, 289-90 (3d Cir. 1994)). In a subsequent decision, the Court stated that as to expert testimony based on "technical or other specialized knowledge," *Daubert* "tests are helpful to assist us in our consideration of the expertise in question" (*United States v. Velasquez,* 64 F.3d 844, 850 (3d Cir. 1995)). In addressing the reliability prong of *Daubert,* the Court noted the expert's qualifications and the standard methodology underlying her testimony. The Fifth Circuit Court also requires that nonscientific expert testimony have some "indicia" of reliability to satisfy *Daubert.*

The First Circuit, noting its gatekeeping function under *Daubert,* has found nonscien-

tific expert testimony admissible as long as it is sufficiently reliable. In determining the reliability of such testimony in the context of banking and commercial transactions, the Court looked to the underlying methodology and qualifications. (See, for example, *United States v. Kayne,* 90 F.3d 7 (1st Cir. 1996) and *Den Norske Bank v. First National Bank of Boston,* 75 F. 3d 49 (1st Cir. 1996).)

In *U.S. v. Kayne,* for example, the admissibility of testimony concerning the value of rare coins was considered. The Trial Court had admitted the testimony and the Circuit Court held the admission to be proper under the circumstances:

> The defendants complain...that the opinions were not based on consistent standards and were subject to factors of taste and assessment of the market and that the experts often disagreed among themselves. This is not unusual. These matters are properly the subject of searching cross-examination.

In all of these cases, the Court notes that its gatekeeping function under *Daubert* is limited to determining the reliability of the expert evidence, and that it is the role of the jury, not the judge, to give that evidence as much weight as it deserves. Therefore, in determining the admissibility of nonscientific expert testimony, it is important to focus on the reasoning and methodology employed, rather than the conclusions reached.

Several Circuits have held that *Daubert's* principles are limited to scientific testimony. The Ninth Circuit, which established the *Daubert* factors, has declined to extend these factors to nonscientific expert testimony. In *United States v. Cordoba,* the Court did not apply *Daubert* to a government agent's expert testimony on the modus operandi of narcotics traffickers. The Court reasoned that "*Daubert* applies only to the admission of scientific testimony" (104 F.3d 225, 230 (9th Cir. 1997)).

The Second Circuit has also interpreted *Daubert* as applying only to scientific evidence. In *Iacobelli Construction, Inc. v. County of Monroe,* the Court held that nonscientific evidence did "not present the kind of 'junk science' problems that *Daubert* meant to address" and that, therefore, reliance on *Daubert* in determining the admissibility of such testimony was "misplaced" (32 F.3d 19, 25 (2d Cir. 1994)).

Similarly in *Tamarin v. Adam Caterers, Inc.* the Court held that an accountant's expert testimony did not have to meet the *Daubert* standard, as "that case *(Daubert)* dealt specifically with the admissibility of scientific evidence" (13 F.3d 51, 53 (2d Cir. 1993)).

In these Circuits, the Courts have applied a more traditional Rule 702 analysis in determining the admissibility of nonscientific expert testimony, focusing on the issues of relevancy, qualifications, and helpfulness to the jury. As the Tenth Circuit noted:

> We do not believe *Daubert* completely changes our traditional analysis under Rule 702. Instead, *Daubert* sets out additional factors the Trial Court should consider under Rule 702 *if an expert witness offers testimony based upon a particular methodology or technique* (*Compton,* 82 F.3d at 1519; emphasis added).

THE CALIFORNIA APPROACH: THE *KELLY-FRYE* RULE

The California Supreme Court rejected the *Daubert* approach in determining the reliability and admissibility of new scientific techniques (*People v. Leahy,* 34 Cal. Rptr. 2d 663, 882 P.2d 321 (1994)). Instead, the California Court has continued to apply the *Kelly-Frye* "general acceptance" standard. (See "Meeting the 'General Acceptance' Standard in California" on page 6.)

In the 1976 *People v. Kelly* decision, the California Supreme Court unanimously confirmed its adherence to *Frye v. United States,* 293 F. 1013 (D.C. Cir. 1923). The *Kelly-Frye* rule states that in order for expert testimony based upon application of new scientific technology to be admissible, the proponent must sufficiently establish reliability of method, usually by expert testimony, that the witness furnishing the testimony is properly qualified as an expert to give an opinion on the subject, and that correct scientific procedures were used. Additionally, the proponent must establish reliability of the new scientific technique by proving that the technology has gained "general acceptance in the particular field in which it belongs" (*People v. Kelly,* 130 Cal. Rptr. 144, 148, 549 P.2d 1240 (1976)).

Similar to *Daubert,* the California courts also require that the expert testimony be helpful to the jury. The expert's testimony is admissible if it is "related to a subject that is sufficiently beyond the common experience...and will assist the trier of fact" in resolving the issues (*California Evid. Code* § 801).

In determining the admissibility of nonscientific expert testimony, it is important to focus on the reasoning and methodology employed, rather than the conclusions reached.

In *Leahy,* the Court reiterated the policy behind this "cautious" and "conservative" approach of *Kelly-Frye.* While not perfect, the standard is necessary to keep unreliable evidence from a jury that may unwittingly give too much weight to the evidence of a scientific device that suggests infallibility, but is actually unproven *(Leahy,* 34 Cal. Rptr. 2d at 670; *People v. Webb,* 24 Cal. Rptr. 2d 779, 798, 862 P.2d. 779 (1993)). Therefore, "California Courts have long been willing to forego admission of 'new' scientific methods used to detect, analyze, or produce evidence absent a credible threshold showing that 'the pertinent scientific community no longer views them as experimental or of dubious validity'" *(Webb,* 24 Cal. Rptr. 2d at 798).

CONCLUSION

As with most aspects of trial, proper preparation leads to successful outcomes. Careful expert selection, coupled with in-depth research and analysis, capped by an independent witness to verify the methodology and reliability of the technique, will enhance the chances of overcoming a *Daubert* challenge. Once overcome, evidence is heard and considered by the trier of fact. CE

Meeting the "General Acceptance" Standard in California

"'General acceptance' [of a theory or methodology] does not require unanimity, a consensus of opinion, or even majority support by the scientific community." *(Leahy,* 34 Cal. Rptr. 2d at 671.) The *Kelly-Frye* rule also does not require that the Court determine whether the procedure in question is reliable as a matter of scientific fact. Rather, under *Kelly-Frye,* the admissibility and reliability questions regarding new scientific techniques are settled by those persons most qualified to assess their validity. (*Id.* at 672.)

To meet the "general acceptance" standard, the Court determines, through expert testimony and the relevant technical or professional literature, whether the new scientific method is accepted as reliable in the relevant scientific community and whether scientists in either number or experience publicly oppose the technique as unreliable (*People v. Axell,* 1 Cal. Rptr. 2d 411, 421-22 (1992)).

In *Leahy,* the Court found that it was insufficient that law enforcement had widely accepted and used horizontal gaze testing to determine intoxication. Rather, the Court stated that "'general acceptance' under *Kelly* means a consensus drawn from a typical cross-section of the relevant, qualified scientific community" (*Leahy,* 34 Cal. Rptr. 2d at 679).

Therefore, in order for expert testimony based on new scientific theory to be admissible under *Kelly,* the debate in the scientific community must first be carried out. This conservative approach can prevent the admissibility of novel scientific theory or technique that is relevant and helpful to the jury's determination of the issues involved. *Daubert,* on the other hand, is a more flexible standard, which considers acceptance by the scientific community only one of many factors. And novel theories are admissible under *Daubert* even if recognized only by a minority of the scientific community. What constitutes a "minority" is a matter that must necessarily be analyzed on a case-by-case basis. Under this standard, the role of the jury is to examine the expert evidence and give the proper weight considering the competing opinions proffered and support for each.

It is important to note that *Kelly-Frye* only applies to that "limited class of expert testimony that is based in whole or part, on a technique, process, or theory that is new to science, and even more so the law" (*Leahy,* 34 Cal. Rptr. 2d at 674). The *Kelly-Frye* standard does not apply to expert opinion testimony. Therefore, experts may testify as to their opinions or "point of view" as long as it is not based upon new scientific technology. Experts may proffer opinion testimony based upon their education, training, clinical experience, and expertise in the field. (See for example, *West v. Johnson & Johnson Products Inc.,* 220 Cal. Rptr. 437, 446 (1985) in which the expert offered opinion testimony that, based upon his experience and medical assessment, plaintiff's toxic shock syndrome was caused by defendant's tampons.) The jury is then free to give the expert's opinion as much weight as the opinion and expert warrant in deciding the case.

If the expert's opinion is based upon a new scientific technique, the proponent should submit published writing in scholarly treatises and journals for the Court's review. Presenting another expert witness to testify as to the general acceptance of the technique will also help to overcome any challenges. It is important to remember, however, that the trial courts must consider not just the quantity but also the quality of the experts who support or oppose the technique as reliable. Merely presenting a "majority support or opposition by persons minimally qualified to state an authoritative opinion is of little value...." (*Leahy,* 34 Cal. Rptr. 2d at 678-79).

Therefore, as in overcoming the *Daubert* challenge, the selection of experts properly qualified in the relevant field is paramount.

IS THERE STILL A SIZE PREMIUM?

Michael Annin, CFA, and Dominic Falaschetti, CFA

OVERVIEW

In recent years, small capitalization stocks have been under-performing (providing lower overall returns) large capitalization stocks. Does this mean that there really is no size premium?

It should be no surprise that small capitalization stocks under-perform large capitalization stocks for a given period because of the serial correlation that has been observed in the size premium historically. While the under-performance of small capitalization stocks over the more recent periods might make for interesting conversation, it does not mean that there has been a fundamental shift in the markets that would eliminate the size premium.

DEFINITION OF THE SIZE PREMIUM

Historically, small capitalization stocks have had both greater risk and greater returns than large capitalization stocks. In other words, as an asset class, small capitalization stocks not only are riskier than large capitalization stocks, but also have provided greater returns. Investors have generally been rewarded for taking the additional risk inherent in small stocks.

Ibbotson Associates measures the small stock premium using data back to 1926. Other studies such as that done by Grabowski and King in 1995 have examined the small stock premium over shorter periods, but have arrived at similar results.

The identification of the size premium is significant because it can have a material impact on the discount rate and therefore have a material impact on the overall valuation derived for a company. In this article, we refer to small capitalization stocks as micro-capitalization stocks which represent the smallest 20 percent of stocks on the New York Stock Exchange. Large capitalization stocks are represented by the S&P 500. The current edition of Ibbotson Associates' *Stocks, Bonds, Bills and Inflation (SBBI) Yearbook* lists a size premium for micro-capitalization stocks of 3.47 percent. *SBBI* also shows that for very small companies, those falling in the tenth decile of the New York Stock Exchange, the size premium can approach 5.78 percent. A 350 basis point addition to a discount rate will almost always have a material impact on the overall valuation derived from the discounted cash flow analysis.

Because the small stock premium has existed historically, it is assumed that it should be applied to discount rates for small companies for valuation purposes. This implicitly assumes that the appraiser expects the small stock premium to continue indefinitely.

REVIEW OF RECENT STATISTICS

If one measures small stocks as the bottom 20 percent of the New York Stock Exchange and large stocks as the S&P 500, small company stocks have actually under-performed large company stocks over the past several years. This has led some observers to question the validity of the small stock premium—effectively reducing the discount rates for small companies. For the remainder of this article, we will use this New York Stock Exchange data to represent small company stocks. For simplicity, we will also use a simple, arithmetic difference for calculating the small stock premium. These two aspects differ slightly from the size premiums and small stock premium presented in Ibbotson's *Stocks, Bonds, Bills and Inflation Yearbook.*

NO SURPRISE IN RECENT STATISTICS

As the table on page 8 shows, for the twenty-year period of 1977–1996, small company stocks have actually under-performed large company stocks for ten of those twenty years. Does this mean that the nature of the stock market has changed and that small companies do not deserve a size premium?

The answer to this question is an emphatic "no." For several reasons, we should not be surprised by the performance of small stocks over the more recent past.

RISK

History tells us that small companies are riskier than large companies. To compensate investors in small companies for taking on this additional risk, small companies have provided higher returns to their investors than large companies. It is important to note

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that the risk-return profile is over the long term. If small companies did not provide higher long-term returns, investors would be more inclined to invest in the less risky stocks of large companies.

The increased risk faced by investors in small stocks is quite real. The long-term expected return is quite different than short-term expected returns for any asset class. Investors in small capitalization stocks should expect losses and periods of under-performance.

Exhibit 1 (opposite page) shows the standard deviation of large capitalization and small capitalization stocks along with the small stock premium on a rolling sixty month basis. It is clear from the graph that on a sixty month basis the standard deviations of all three have been declining. However, reductions in standard deviation (risk) have occurred in the past when measured over a short time span such as sixty months. There is no evidence to suggest that this reduction in standard deviation will continue or that the market dynamics have changed, effectively reducing the long-term expected returns of small company investors.

SERIAL CORRELATION

Serial correlation, also known as autocorrelation, in a return series describes the extent to which the return in one period is related to the return in the next period. A serial correlation of zero indicates that a series is random and cannot be predicted. A serial correlation of near one implies that a series is quite predictable from one period to the next. Serial correlation statistics are used to spot trends in data.

EXHIBIT 2

Serial Correlation

Large Company Stocks	–0.01
Small Company Stocks	0.12
Equity Risk Premium	0.00
Small Stock Premium	0.36

It is possible to calculate a serial correlation for return series like large capitalization stocks and small capitalization stocks. It is also possible to calculate a serial correlation for derived series such as the equity risk premium and the small stock premium.

Exhibit 2 shows the serial correlation for large and small company stocks as well as the equity risk premium and small stock premium. It is interesting to note that while the serial correlations, as calculated by Ibbotson Associates, of large company stocks, small company stocks, and the equity risk premium are at or near zero, the serial correlation of the small stock premium is 0.36.

A serial correlation of 0.36 for the small stock premium is significant because it indicates that the small company premium has

TOTAL RETURN — 1977–1996

Year	Large Cap	Micro Cap	Year	Large Cap	Micro Cap
1977	–7.18%	20.02%	1987	5.23%	–8.97%
1978	6.56%	19.40%	1988	16.81%	18.91%
1979	18.44%	40.72%	1989	31.49%	2.36%
1980	32.42%	29.63%	1990	–3.17%	–35.98%
1981	–4.91%	14.04%	1991	30.55%	42.39%
1982	21.41%	32.98%	1992	7.67%	20.59%
1983	22.51%	48.06%	1993	9.99%	15.97%
1984	6.27%	-2.60%	1994	1.31%	–0.76%
1985	32.16%	29.08%	1995	37.43%	20.96%
1986	18.47%	6.32%	1996	23.07%	21.91%

Source: Ibbotson Associates

a tendency to move in cycles. (The standard error for the above serial correlations is 0.12)

Exhibit 3 shows the excess returns of small stocks over large stocks for the years 1926–1996. This graph shows the performance of small company stocks in comparison to large company stocks over an extended period. While there are periods when small company stock excess returns appear to be random, there are also periods when small stock excess returns follow a trend or move in cycles. Because of the serial correlation that exists in the small stock premium, it is not surprising that we have experienced a period when these excess returns have been negative.

TWENTY YEAR HISTORY

While we would argue that it is appropriate to measure the size premium over the entire period from 1926 to present, some practitioners insist that the most recent past is the best indicator of the future. Exhibit 4 shows the excess returns of small capitalization stocks over large capitalization stocks on a rolling twenty year basis. In other words, the data point to the far right of the graph represents small stock excess returns from 1977 through 1996. The data point to the far left of the graph represents small stock excess returns from 1926 through 1945.

This graph shows that there has been no twenty-year time frame in which excess returns on small company stocks over large company stocks have been negative. Furthermore, while the excess returns for the most recent time period are low, they have actually been lower at other points in history. Based on this graph, it is difficult to say that markets have changed and investors in small company stocks will not achieve excess returns in future periods.

CONCLUSION

While it is true that small capitalization stocks have been under-performing large capitalization stocks in recent years, there is no reason to believe that there has been a material shift in the market. In fact, given the risk level inherent in small capitalization stocks and the serial correlation present in the size premium data history, a period of under-performance should be expected. CE

EXHIBIT 1

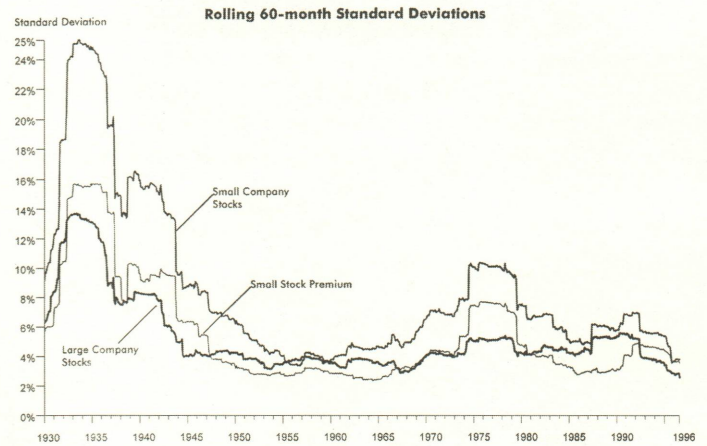


EXHIBIT 3

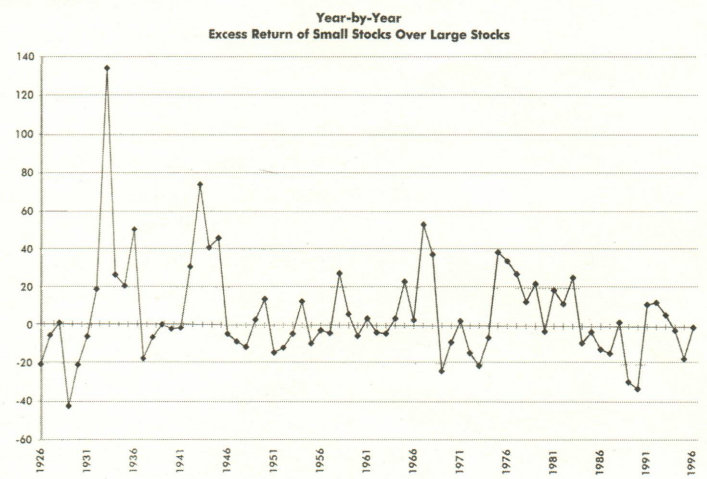
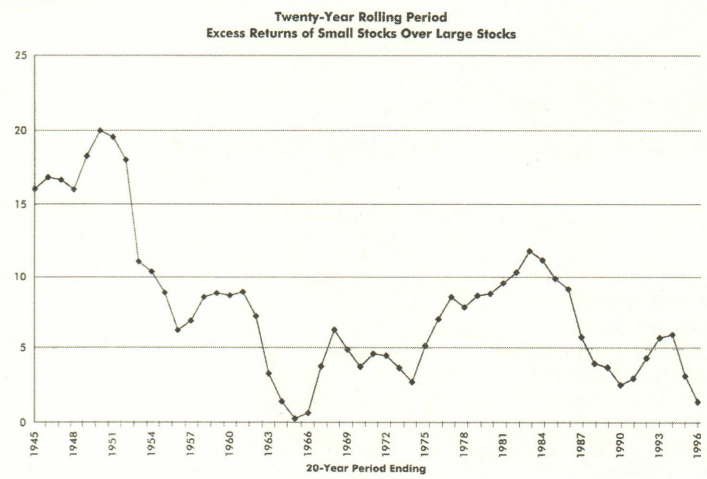


EXHIBIT 4



Expert Tools

MANAGING THE FIRM'S KNOWLEDGE

Eva M. Lang, CPA

"We now know the source of wealth is something specifically human: knowledge. If we apply knowledge to tasks we already know how to do, we call it productivity. If we apply knowledge to tasks that are new and different, we call it innovation. Only knowledge allows us to achieve those two goals."
Peter Drucker.

Although Peter Drucker coined the term *knowledge worker* in the 1960s, it was not until the 1990s that the concept of knowledge management emerged. Knowledge management is the process of capturing a company's collective expertise and experience and then distributing it for the greatest payoff. Think of it as the organized process through which companies attempt to become smarter.

The increase in interest in knowledge management was spurred by the explosive growth of information sources such as the Internet. In 1996, U.S. businesses paid consultants $1.5 billion for knowledge management advice, and that will increase to $5.0 billion annually by 2001, according to the Gartner Group (Stamford, CT), a technology consulting firm. A 1997 study by the Delphi Consulting Group (Boston, MA) showed that 28 percent of organizations already use knowledge management, and another 70 percent plan to use it in 1998.

Modern knowledge management got its start in the Big Six consulting firms, but now companies in nearly every industry are recognizing the value of intellectual capital and are initiating programs to capture and manage it.

CURING CORPORATE AMNESIA

Knowledge management can be the cure for corporate amnesia. Companies that fail to document and draw from past experiences are constantly "reinventing the wheel," often at great financial cost.

Nilly Ostro, a knowledge management industry observer, relates the story of a large multinational company bidding for an infrastructure project in Asia. Several years earlier, the company dealt with several of the same sourcing issues when building a plant in Thailand. However, no one recorded the solutions and best suppliers during the first project, and the manager who headed the Thai project had moved to Europe. The cost of having to obtain this information for a second time put the company's bid months behind those of more savvy competitors.

Problems resulting from corporate amnesia aren't limited to large multinational firms. In fact, the consequences are greater in the relative sense for smaller companies, such as CPA firms. Small service firms tend to be very dependent upon the expertise of a few workers, but have less time and fewer resources with which to capture and document this knowledge.

Companies that downsized workers in recent years are turning to knowledge management practices to recover the years of organizational memory and intelligence that were lost when experienced workers left. Nilly Ostro points out that companies that would never consider offering their fixed assets for free, have liquidated their intangible assets at zero return.

KNOWLEDGE AFFECTS COMPANY VALUE

Another impetus for the implementation of knowledge management practices has been evidence of the dollar value of knowledge capital expressed in the valuations of technology or intelligence firms. Industry consultant Paul Strassmann views it this way, "When you sell a company at a high multiple of its book value, you monetize an estimate of its knowledge capital." As an example, he cites Apple's purchase of NeXT for $400 million, which bought Apple almost no tangible assets. Other examples abound, including Netscape's IPO which immediately gave a company with few assets and no earnings a market value of nearly $140 million.

Clearly knowledge is important and has a real dollar value, so how can companies best manage this important asset? Despite the impression that knowledge management is a technology issue, implementing *Lotus Notes* or another groupware program is not the way to start. Psychological and organizational issues must be addressed before technological solutions can be entertained.

Eva M. Lang, CPA, a contributing editor, is vice president of Mercer Capital Management, Inc., Memphis, TN, and is a member of the AICPA Business Valuations and Appraisals Subcommittee.

FOSTERING A CULTURE OF SHARING

Knowledge management practices are doomed to failure unless companies foster a culture that supports the sharing of information. Apparently a great many of America's new knowledge workers were absent from kindergarten the day sharing was taught. Employees' desire to hoard information is the biggest hurdle to overcome in implementing successful knowledge management practices. This is understandable, as organizations have traditionally not rewarded the sharing of knowledge. Workers could harm their own chances for advancement if they put valuable information in the hands of coworkers who might attract attention for a job well done.

These concerns must be addressed before implementing new practices. Amoco spent more than a year introducing knowledge management concepts to the organization before introducing new technologies. The focus during this period was on making the sharing and use of knowledge instinctive among the workforce.

The only way to foster a successful culture of knowledge sharing is to have the support of senior management. Buckman Laboratories of Memphis is often cited for having a successful knowledge sharing program. A major factor in the success of this program is the involvement of Vice Chairman and owner Bob Buckman. He personally scans all messages within the company's knowledge management system. Buckman gives laptop computers to the 150 most knowledge-sharing employees each year. At Ernst & Young, bonuses and employee performance evaluations are tied to the number of contributions made to the company's knowledge databases.

MORE THAN TECHNOLOGY NEEDED

Once a culture that encourages sharing of information has been established, the focus should be on existing systems that could be used for information sharing. Every company already has informal networks and other knowledge-sharing systems. At the outset, a knowledge management program should identify these systems before rushing out to purchase the latest software. Technology is not the solution, but the means.

Resources for Information About Knowledge Management

Internet Links to Knowledge Management Information

Knowledge, Inc.
http://www.webcom.com/quantera/welcome.html

KM Metazine
http://www.ktic.com/topic6/km.htm

World Wide Web Virtual Library–Knowledge Management
http://www.brint.com/km

Guidelines for Developing an Information Strategy, Coopers & Lybrand
http://back.niss.ac.uk/education/jisc/pub/infstrat

Intranet/Knowledge Management Resource Center
http://www.uni-hohenheim.de/~miepple/ikcenter.html

Knowledge Management Forum
http://www.km-forum.org

International Knowledge Management Network
http://kmn.cibit.hvu.nl/index.html

Ernst and Young's Knowledge Based Business Page
http://www.ey.com/knowledge/default.htm

KPMG Knowledge Management Report
http://www.kpmg.co.uk/uk/services/manage/powknow/index.htm

Print Resources

Cohen, Don et al. *Managing Knowledge for Business Success: A Conference Report.* New York: The Conference Board, 1997.

Davenport, Thomas H. "Ten Principles of Knowledge Management and Four Case Studies," *Knowledge and Process Management* (Vol. 4, No. 3, 1997): 187–208.

Hibbard, Justin, and Karen M. Carrillo. "Knowledge Revolution," *InformationWeek* (January 5, 1998): 49–54.

McGee, James, and Laurence Prusak. *Managing Information Strategies.* Ernst & Young Information Management Series. (New York: John Wiley & Sons, 1993).

Pascarella, Perry. "Harnessing Knowledge," *Management Review* (October 1997): 37–40.

Clara O'Dell, president of the American Productivity & Quality Center, puts it this way: "While technology can help share the knowledge stored in the minds of employees, customers, and suppliers, without the necessary complementary changes in management practice and culture, you may build it, but they won't necessarily come."

Tom Elsenbrook, partner in charge of

knowledge services for Andersen Consulting, has developed a seven-step checklist for implementing a knowledge management program. Note that technology is not mentioned until step six:

1. Appoint a chief knowledge officer. This executive can create a knowledge management strategy that is linked to your company's objectives.
2. Strengthen upper management's commitment by showing top executives successful knowledge management at other companies.
3. Integrate knowledge management into core work processes. Make knowledge capture a step in key processes.
4. Create a culture of trust and learning. Make employees feel comfortable sharing knowledge.
5. Create discipline in the organization to ensure quality of content.
6. Deploy technologies for creating knowledge and speeding the pace of innovation.
7. Establish methods for measuring the benefits of knowledge management.

SOLUTIONS CAN BE SIMPLE

Granted, technology is an important part of a knowledge management system. It is imperative to have a method for sharing knowledge. However, highly specialized, expensive technology is not always the answer. Buckman Laboratories, which has won awards for its highly touted internal knowledge sharing system, *K'Netix,* uses a technology that is not cutting edge, but that is inexpensive and cost effective: CompuServe bulletin boards set up on the company's intranet.

Lotus Notes and other groupware systems can be successful if users receive the necessary support and encouragement to use them. But many employees find it difficult to locate information in groupware programs and give up using them. Some firms have put in place extensive *Lotus Notes* databases, only to find that employees resort to using e-mail to ask questions. Many in the knowledge management field, including Marc Demarst, Sequent Computer's chief knowledge officer, think that intranets, with their low-cost architecture, open standards, and browser-interface, could become the standard medium for knowledge sharing companies.

Almost every firm can benefit from implementing good knowledge management practices. The key to success is a thoughtful and well planned program that complements existing systems and has the support of management. CE

EXPERT Opinion

50% + 50% ≠ 100%

James R. Hitchner, CPA, ABV

50% + 50% ≠ 100%. No it's not new math! Clearly the Tax Court felt that 50 percent + 50 percent did not equal 100 percent in the *Estate of Thomas A. Fleming, et. al. v. Commissioner Of Internal Revenue.* In Tax Court Memo. 1997-484, issued October 27, 1997, the Court determined that a 27 percent discount applied to a 50 percent interest in a closely held company.

The decedent died on November 22, 1991, which was the valuation date. He owned a 50-percent interest in the common stock of B & W Financial Corporation of Longview, Inc. (B & W Longview). The decedent's spouse owned the other 50-percent interest. B & W Longview made small loans (trade notes receivables) that were regulated by the Office of Consumer Credit of the State of Texas. B & W Longview also had several demand notes.

The company's balance sheet on the valuation date was as follows:

Cash	**$760, 953**
Trade notes receivable (Gross)	**1,012,177**
Less discount for bad debts	**–101,217**
Trade notes receivable (Net)	**910,960**
Nondepreciable assets	**75,323**
Demand loans	**652,139**
Other assets	**22,630**
Total assets	**$2,422,005**
Total liabilities	**–253,166**
Stockholders Equity	**$2,168,839**

PRIOR TRANSACTIONS

Prior to his death, the decedent participated in several transactions of companies similar to B & W Longview. The transactions included a 50–percent interest purchased in 1987, which gave the decedent 100-percent control. The seller was not related to the decedent. The price was determined as book value plus a 23-percent premium on the trade notes receivable. In 1989, the decedent sold his 100-percent interest to an unrelated party, priced as book value plus a 15-percent premium on the trade notes receivable.

In 1991, the decedent sold a 100-percent interest in several companies to unrelated parties for book value plus a 23-percent premium on the gross trade notes receivable. Two of the transactions were for 100-percent control. The other transaction was of a 50-percent interest but gave control to the buyer, who already owned the other 50-percent interest.

The transaction data presented above was a focal point for the Court in this case. A thorough understanding of such transactions is critically important when determining both the applicability and magnitude of various discounts.

VALUES

Both sides retained experts, both of whom originally presented two valuation methods under the market approach: "In applying that approach, each of those experts used a combination of the transaction method and the market multiple or guideline company method (market multiple method) in order to arrive at his opinion of that value."

The Estate filed an estate tax return on August 7, 1992 with a value for decedent's 50-percent interest in B & W Longview at $1,000,000. Around November 17, 1993, the Estate filed an amended return with a new value of $726,000. At trial the Estate's expert further modified his report, claiming a value of $604,777.

The IRS, however, claimed at trial that the value was $1,100,000, which is 82 percent higher than the Estate's value.

TAXPAYER'S EXPERT

The Estate retained Richard P. Bernstein, President of Bernstein, Phalon & Conklin, a business valuation firm. Bernstein modified his market multiple method and gave equal weight to both his methods "...because he did not believe that either method alone produced what he considered to be an accurate estimate of the fair market value on the valuation date of the stock interest in question."

Transaction Method

In his transaction method, he relied upon the similar transactions entered into by the

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decedent in 1987, 1989, and 1991. As such, he started with book value, added a 23-percent premium on the trade notes receivable and multiplied this sum by the 50-percent ownership interest. This resulted in a pre-discount value of $1,200,801.

Market Multiple Method

In his modified market multiple method, Bernstein relied upon three publicly traded guideline companies. His application of these companies resulted in a pre-discount value of $660,050. The Court concluded that the results were unreliable and ignored Bernstein's opinion of value based on this method: "Mr. Bernstein did not explain in his report or adequately explain at trial why the three guideline companies that he chose were comparable to B & W Longview on the valuation date and why he selected only three publicly traded companies as guideline companies."

Bernstein averaged his two results of $1,200,801 and $660,050. Given the huge difference in value between the two methods, a better explanation was indeed in order. Furthermore, the market multiple method using public companies indicated a value, prior to discounts, substantially under book value. Although this can happen in certain circumstances, it appears odd here.

Discounts

Bernstein averaged the two results under his two methods and then applied a combined discount for lack of control and lack of marketability of 35 percent.

IRS'S EXPERT

The IRS's expert, Monty L. Harrell, was employed by the IRS as an economist. Harrell also believed that a "...weighted combination of the market-multiple method and the transaction method generally would produce an accurate estimate under the market approach of the fair market value on the valuation date of the stock interest in question."

Transaction Method

Harrell also analyzed the precedent transactions of the decedent. Like Bernstein, he started with book value and added a premium of 23 percent of the gross trade notes receivable. However, Harrell then added an additional 10-percent to 15-percent premium on the demand loans. He then took the 50-percent interest of the decedent and concluded a pre-discount value range of $1,222,222 to $1,248,889.

The Court "...found Mr. Harrell's testimony about the propriety of such a premium to be tentative and unconvincing. Accordingly, we shall not accept Mr. Harrell's opinion that a premium should be applied to the demand loans."

Market Multiple Method

After he prepared his report but before the trial, Harrell "...discovered deficiencies in the data...on which he relied in applying the market multiple method" and testified that the results were unreliable. The Court agreed, stating that "...we shall not give any weight to those results in determining the fair market value of the stock interest in question."

Discounts

Harrell applied a 10-percent minority discount but did not apply a discount for lack of marketability. The Court was "not convinced that Mr. Harrell was correct in not applying any lack-of-marketability discount in valuing the stock interest in question."

COURT'S OPINION

The Court dismissed the market multiple method but expressed concern: "However... we are not persuaded that the respective results of Mr. Bernstein's modified market multiple method and Mr. Harrell's market multiple method are reliable. Consequently, we are left with a deficient record from which to determine the effect of the proper application of the market multiple method...."

The Court did accept its own version of the transaction method. They started with book value and added a 23-percent premium on the trade notes receivable. This approach seems logical since both experts also applied this method in the same way.

As for discounts, the Court agreed with the taxpayer's expert that a discount should be applied for both lack of control and lack of marketability: "A minority discount reflects the minority shareholder's inability to compel liquidation and thereby realize a pro rata share of the corporation's net asset

Finding Fault with the Experts

Although the Tax Court itself sometimes imposes limitations on expert testimony and the strategy of the attorney can sometimes affect the presentation (for example, whether to redirect or not), Tax Court Memo. 1997-484 makes clear the need for valuers to thoroughly explain their methods in arriving at a conclusion of value. In two instances in its opinion on *Estate of Thomas A. Fleming, et al., v. Commissioner of Internal Revenue,* the Court faults the taxpayer's expert for failing to adequately explain his methods.

One instance concerns the selection of guideline companies. In using the market multiple method, the taxpayer's expert "did not explain in his report or adequately explain at trial why the three guidelines companies that he chose were comparable to B & W Longview on the valuation date and why he selected only three publicly traded companies as guideline companies." Consequently, the Court concluded that his results were unreliable and ignored his opinion of value based on this method.

The Court also faulted the taxpayer's expert for failing to explain why he selected a 35-percent discount for minority interest and lack of marketability while the IRS's expert indicated a 10-percent minority interest. The taxpayer's expert "did not specify how much of the 35-percent combined discount that he applied was attributable to the fact that decedent did not own a controlling stock interest in B & W Longview on the valuation date. On brief, petitioner, who has the burden of proof, does not insist that a minority discount in excess of 10 percent be applied in this case."

value. A discount for lack of marketability reflects the fact that there is no ready market for the stock of a closely held corporation."

Since the IRS's expert indicated a discount of 10 percent for minority interest and the taxpayer's expert did not allocate his combined discount of 35 percent for a minority interest, the Court seemed to accept 10 percent: "On brief, petitioner, who has the burden of proof, does not insist that a minority discount in excess of 10 percent be applied in this case."

On the lack of marketability, the IRS's position was that it did not apply since the underlying transaction method involved closely held interests with no ready market. As such, the lack of marketability was already reflected in the prices paid. Although the Court agreed in general with the IRS's position, it disagreed with its specific application in this case. The Court opined that two of the transactions were for 100 percent and that the third transaction gave the buyer 100 percent: "On the record before us, we find that there was even less of a ready market for decedent's 50-percent stock interest in B & W Longview than there was for the stock interests sold in the precedent transactions."

The Court's opinion of value was $875,000 for the 50-percent interest after the application of discounts for lack of marketability and for lack of control. Although a specific amount for the discount was not mentioned, it appears to be approximately 27 percent. When applied sequentially, this indicates a 10-percent discount for lack of control and a 19-percent discount for lack of marketability.

CONCLUSION

Most practitioners agree that, all other things being equal, a 100-percent controlling interest is worth more than a 50-percent interest. As such, if you rely upon the transaction method which includes 100-percent controlling interest, and you are valuing an interest that is less than full control, some discount is usually appropriate. Although a 50-percent interest is not really a minority interest, it lacks control. In a 50-50 ownership situation, neither 50-percent owner can act without the other 50-percent owner's permission. Each can veto the desires of the other 50-percent owner, which is a step up in rights from a pure minority position. Although there is no hard data on discounts for a 50-percent interest, most practitioners agree that the discounts are usually less than those applied to a minority interest of less than 50 percent. It is quite refreshing to see the Court take the time to analyze transactions as they pertain to control versus minority interest. CE

TIP of the Issue

AVOIDING THE EVOLUTION FROM OBJECTIVE INVESTIGATOR TO ADVOCATE WITNESS

William C. Barrett III, CPA, CTP

An expert witness is an authority in a particular field, industry, discipline, or profession accepted by the court or arbitrator. The expert's task is to assist the court by evaluating the facts of a case and rendering a supportable professional or technical opinion about complex matters of cause and effect. The court, of course, needs assurance of the expert's objectivity. This may be a problem for the expert because the court, as well as the opposing attorney may assume that advocacy has supplanted the expert's objectivity. Consider, for example, the following characterization of valuation experts by Judge David Schwartz, when of the U.S. Court of Claims:

> The trier must first judge the qualifications of the opposing experts, then try to understand their presentations, pass on their sincerity and credibility, and finally choose between opposing conclusions. Throughout, there is the uneasy doubt as to an appropriate discount for partisanship. Have the witnesses, both or one of them, anticipated a discount by the trier and hiked their opinions twice, once for discount and once for loyalty to their client, or only once, or even not at all?

Sometimes, the CPA expert must deal not only with the court's and the opponent's assumptions about their advocacy, but also with the real difficulty of maintaining objectivity that is posed in some cases. Conclusions about technical and professional issues are sometimes based on probability rather than certainty. The determination of the value of closely held stock, for example, is a matter of judgment, rather than just mathematics. In such instances, the CPA expert needs to be particularly careful to maintain objectivity and avoid becoming an advocate for an unwarranted position or conclusion. If the expert becomes an advocate for the underlying goals of the case, his or her conduct will be unethical.

A metamorphosis from objective witness to advocate can happen during one of the six segments of a litigation services engagement: engagement interview, investigation process, attorney communications, reporting, depositions, and testimony.

Perhaps the most critical stage is the engagement interview. At this point, the CPA needs to clarify the scope of the engagement and determine whether any limitations have been set. Because of time and monetary constraints, for example, counsel may wish to limit the scope of the expert's involvement or make that involvement conditional in anticipation of expanding or curtailing the scope of the expert's involvement. As the case progresses, the expert's scope of involvement may change from providing services as a consultant to testifying as an expert witness. The CPA needs to ensure that the scope of the engagement, including any changes, is documented in the case file and that all expert opinions offered fall within the scope of the engagement.

While each of the six segments of a litigation services engagement is a progression built upon the prior area, the investigation process is perhaps the key to keeping the expert an objective witness. A strong, thoroughly executed investigation gives the support needed to withstand the pressures and outright manipulations inherent in the rest of the litigation process.

DATA ISSUES

As the investigation progresses, certain issues can arise that make it difficult for the CPA expert to keep the investigative process objective. Attorneys and clients come to the CPA with their own view of the facts. Inadvertently or deliberately, they may provide inaccurate information or they may withhold information. This creates an opportunity for opposing counsel upon cross-examination to impeach even the most seasoned expert witness. To avoid

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such impeachment, the CPA needs to recognize that attorneys and their clients are biased. The CPA needs to keep an open mind and avoid reaching conclusions prematurely. For example, the CPA may use the scientific method of forming a hypothesis. Then the CPA carefully follows well established investigative steps and develops forms, procedures, and processes that will ensure proving or disproving the hypothesis and that he or she will not neglect or overlook critical data, or be taken in by inaccurate data.

Even after the CPA has thoroughly investigated the facts of the case and has objectively reached a supportable conclusion, he or she is still vulnerable to subtly shifting from objective expert to advocate. Sometimes, the expert's conclusion can fall within a range on a continuum of conclusions that at one end support the client-attorney's goals and at the other end support the opponent's goals. Wherever the CPA expert's conclusion falls on that continuum, he or she needs to return to the data to be sure that it in fact supports that view.

Communications between the attorney and the CPA expert are necessary to ensure that everyone on the team is aware of all facts and the direction of the case. Such communications also provide opportunities for the expert to learn of new or contradictory data and to assess challenges to the conclusions he or she has reached. At this point, the expert needs to avoid becoming attached to the original conclusion if it's attacked by the attorney or other team members. Understandably, an expert who has invested considerable time and effort in reaching this conclusion may be reluctant to change it. But the expert must maintain an objective point of view, realistically assessing challenges to opinions and remaining open to the possibility of flaws in the initial approach. A change may or may not be warranted, depending on the supporting data. Again, the expert needs to return to the data to see which conclusion it best supports.

INVESTIGATIVE ISSUES

When an appropriate investigation is not done, the expert's entire opinion may be in jeopardy. The CPA expert needs to be careful, for example, when using a purchased software program (for example, valuation software) as part of the investigation to reach a conclusion. The conclusion may be subject to many variables unaccounted for by the software, making the expert's credibility vulnerable.

In general, the CPA expert can help to avoid having testimony impeached by reviewing the investigation carefully before testifying. The CPA should review records of time and research to make sure they agree with the case file reports. The CPA should also review the files to make sure his or her conclusions are supported with documentation.

Although the CPA expert can advocate his or her position based on the findings of an investigation, as an expert witness, he or she must be objective whether or not those findings support the goals being advocated by the attorney. This objectivity is required not only to provide services ethically, but also to ensure attracting the right kind of referral sources and clients. CE

In Upcoming Issues

- **Tax Penalties Related to Valuation Issues**
- **Identifying and Investigating Pyramid and Ponzi Schemes**
- **Taxes, Inflation, and Discount Rates in Computations and Awards**
- **Valuing Construction Companies**
- **Malpractice Concerns as an Expert Witness**

Resources For CPA Experts

WEBSITES

Venture Capital

Price Waterhouse (www.pc.com/vc/) lists hundreds of recent venture capital investments, including the transaction amounts. The database identifies who is funding what.

DataMerge Capital Resources (www.datamerge.com/financing2.htm) provides articles and a database of venture capitalists, along with its own line of tools and products.

Yahoo Internet Life's Web Wallet (www3.zdnet.com/yil/content/depts/columns/951205.html) by Russell Shaw features a column on venture capital with links that include Yahoo's Business and Economy Venture Capital subdirectory, which lists about fifty underwriting firms.

Company Annual Reports

Reuters Money Net.com (www.moneynet.com)

Investor's Business Daily Annual Report Gallery (www.reportgallery-.com/bigaz.htm)

Legal Research

The Complete Internet Researcher (www.aallnet.org/products/crab/index.html) serves as a guide to legal professionals who are doing research on the Internet.

Other books/websites devoted to assisting researchers include:

How to Use the Internet for Legal Research by Find/SVP (www.findsvp.com)

The Practical Litigator's Guide to Internet Research (www.aliaba.org/aliaba/intro.htm)

Internet Guide for the Legal Researcher by Don MacLeod (www.infosourcespub.com)

The Library of Congress Legislative Server THOMAS (//thomas.loc.gov) tracks pending and new legislation.

Villanova Law School's Federal Web Locator law.vill.edu/fed-agency/fedwebloc.html) provides a comprehensive list of federal Websites including all the federal courts and case law.

U.S. State and Territorial Laws (//law.house.gov/17.htm) and Piper Resources (www. piperinfo.com/state/states.html) provide comprehensive listings of state and local government and legal Web sites.

Current Case Law

Free access to case law, although of varying depths, is provided at these Web sites:

ABA LawLink (www.abanet.or/lawlink/home.thml)

Cornell's Legal Information Institute (www.law.cornell.edu)

FindLaw (www.findlaw.com)

American Law Sources On-Line (www.lawsources.com/also/usa.htm)

Versuslaw (www.versuslaw.com) provides fee-based full text opinions from federal and state appellate courts.

Economic Information

Several sources of economic information are available in print and in whole or in part on Web sites:

The Statistical Abstracts of the United States (www.census.gov/stat_abstract) presents more than 1,400 tables and graphs of statistics on social, economic, and international subjects in a hard cover edition. The most popular charts are on the Web site.

Federal Reserve Bulletin (www.bog.frb.fed.us/pubs/bulletin/default.htm) is a monthly publication of the Board of Governors of the Federal Reserve System. It compiles articles that report on and analyze the financial services sector and economic developments, discuss bank regulatory issues, and present new data.

Survey of Current Business (www.bea.doc.gov/bea/scbinf.html) is published monthly by the U.S. Bureau of Economic Analysis, Department of Commerce. This journal contains estimates and analyses of all phases of the U.S. economy. The Internet version must be subscribed to.

Economic Report of the President (www.stat-usa.gov/BEN/publications.html) is a report issued by the U.S. Council of Economic Advisers. It offers a comprehensive discussion of the U.S. economy, accompanied by more than 200 statistical tables.

PRINT RESOURCES

Industry Information

The WEFA Industrial Monitor is an annual publication of John Wiley & Sons, Inc. It provides an analysis of more than 130 industries, including an overview of supply and demand conditions, industry trends, and historical and projected growth rates. It discusses pricing trends and industry structure and supports the analysis and discussion with graphs and tables. A companion CD-ROM allows downloading of text, graphs, and tables. Book: $59.95; CD-ROM: $149.

RECENT COURT CASES

Discount for Capital Gains

Eisenberg v. Commissioner, No. 17267-95, 1997 WL 663171 (U.S. Tax Court, October 27, 1997).

FYI...

SEVEN HUNDRED SIT FOR ABV EXAM

Almost 700 CPAs took the first written examination for the Accredited in Business Valuation (ABV) designation in ten cities across the U.S. on November 15, 1997. The ABV credential was awarded to 520 of the candidates.

To earn the ABV credential, in addition to passing the written exam, candidates must provide evidence of ten business valuation engagements that demonstrate substantial experience and competence. To maintain the credential, every three years, they must submit evidence of substantial involvement and continued competency in five business valuation engagements, and they must earn sixty hours of related CPE.

The next exam is scheduled for Monday, November 2, 1998. The cities in which it will be administered will be determined later this year.

The AICPA has maintained a list of members who requested information packets for the first exam, but chose not to participate. Those members will automatically receive updated information about the next examination, along with a new application and experience affidavit in April.

Other members can request information packets by—

- Calling the ABV HelpLine at 212-596-6254.
- Faxing their request to the ABV FaxLine at 212-596-6268: Include firm name, telephone and fax numbers, e-mail address, and AICPA member number.
- Visit the AICPA Homepage at www.aicpa.org/members/div/mcs/abv.htm.

GLOSSARY OF BUSINESS VALUATION TERMS IN PROGRESS

To foster uniformity in the provision of business valuation services, the organizations that represent business valuation professionals have formed a task force to develop a glossary of as many terms used in business valuation practice as possible. James L. "Butch" Williams, a member of the AICPA Business Valuations and Appraisals Subcommittee, organized the task force. In addition to the AICPA, the participating societies are the American Society of Appraisers (ASA), Institute of Business Appraisers (IBA), the Canadian Institute of Chartered Business Valuators (CICBV), and the National Association of Certified Valuation Analysts (NACVA). Each society will have two representatives on the task force.

ABA BEGINS MODEL MEDIATION LAW PROJECT

The American Bar Association Section of Dispute Resolution is developing a model law to regulate mediation. The ABA expects the project, which began last Fall, to take three years. Its aim is to replace the "nation's current patchwork of intricate, confusing, and often conflicting state laws on mediation with a simplified uniform standard." The project will conclude with a presentation to the Section of Dispute Resolution's Section Council in 2000 and subsequently to the National Conference of Commissioners on Uniform State Laws.

Members of the AICPA Litigation and Dispute Resolution Services Subcommittee have discussed the project with the ABA and have been assured that there is no intention of excluding CPAs from mediation.

The first phase of the project includes a review of existing state and federal mediation statutes and court rules. Their findings will focus on specific issues including mediator qualification, confidentiality, and the effect of coercion. The drafting phase will be completed in 1999 and will be followed by an opportunity for comments before the proposed model law is made final.

The project welcomes ideas and suggestions, which can be directed to Richard C. Reuben, Associate Director of the Stanford Center on Conflict and Negotiation at richard@leland.stanford.edu.

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INVESTIGATING WHITE COLLAR CRIME

Ronald L. Durkin, CPA, of Neilson, Elggren, Durkin & Company, Los Angeles, CA reviewed *Investigating White Collar Crime: Embezzlement and Financial Fraud* by Lieutenant Howard E. Williams (Springfield, Ill.: Charles C. Thomas Publishing, 1997) in the January/February issue of *CPA Management Consultant.* Durkin found that the book provides some helpful guidance to CPAs involved in fraud investi-

gation. He "particularly liked Williams's categorization and descriptions of white-collar crime: crimes committed by individuals against institutions, crimes in furtherance of a legitimate business, and criminal activity disguised as a legitimate business. In describing these crimes, Williams provides the reader with some very valuable insights into the criminal mind.

"Any fraud investigator will benefit from reading Williams's description of the elements of a fraud case and his lengthy discussion of the reliance by victims on false representations.

"For fraud investigators, probably the most helpful aspect of the book is the chapter dealing with financial interviewing and interrogation. Although it would be rare for a CPA to interrogate the subject of a fraud investigation, the sections dealing with how to conduct an interview will enlighten even an experienced investigator....

"*Investigating White Collar Crime* appears to be written primarily for the law enforcement community...not...for CPAs, since he spends two chapters discussing basic accounting terminology and theory. However, the section dealing with financial statement ratios and analysis is a good refresher for CPAs."

Durkin faults the author for failing to caution readers that the investigator's report should present factual information without offering an opinion about whether a fraud has been perpetrated. That is a conclusion to be left to the client or the trier of fact. Durkin cites a few other of the book's shortcomings, but he concludes that "accountants will find *Investigating White Collar Crime* to be a useful reference guide on how to conduct a fraud investigation."

MCS Section members receive *CPA Management Consultant* as a member benefit. Readers who do not receive the newsletter and wish to receive a sample copy with Durkin's review should call Bill Moran at 201-938-3502; fax: 201-938-3780; e-mail: wmoran@aicpa.org. CE

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